



ANEC/EEB Position Paper on Environmental Management System Standards

2003-02-21

Features of EMS Standards

Environmental management system standards were developed in the early 1990s in several countries. The first standard was approved by the British Standards Institution (BSI) in 1992 and became a model for the ISO standard 14001, which was elaborated in the years 1991-1996. The European "Eco-Management and Audit Scheme" (EMAS) was adopted in 1993.

ISO 14000 specifies a set of measures to be incorporated into a company's management system aimed at dealing with environmental aspects in a systematic way including the following major elements:

- definition of an environmental policy including performance objectives
- assessment of environmental aspects
- identification of legal obligations
- establishing an environmental management programme
- definition of procedures to achieve the objectives
- monitoring of the system and improvement

The European EMAS scheme is based on the international standard but contains additional requirements:

- initial environmental review
- independent verification
- an accreditation system for verifiers
- validated environmental statements
- employee involvement



The systematic coverage of the environmental dimension by all relevant operations of an organisation undoubtedly offers opportunities for the reduction of environmental burdens and resource consumption. Nevertheless, the development of EMS standards in general and ISO 14001 in particular have raised considerable concern, most notably by the NGO community, but also by other parties. Comprehensive reviews have been made by e.g. Riva Krut and Harris Gleckman (1) and Virginia Haufler (2). ANEC and EEB have reviewed the arguments of parties involved and conclude that many of the reservations expressed are valid. Before Environmental Management Standards have not undergone a substantive change with respect to their content and application, they should not serve as instruments to implement eco-design schemes like Integrated Product Policy (IPP) or the one on End-use Equipment (EuE). Criticism with respect to the procedures to establish those standards – e.g. the strong dominance of business interests within ISO – are being dealt with elsewhere.

EMS – the Business Approach

It should be noted that ISO 14001 is generally referred to as the business answer to the challenge of sustainable development, which explains the limitations of the approach. Irrespective of the differences, all EMS standards share one idea, which raises discomfort – the idea that the setting of environmental performance levels is left to the discretion of industry rather than being based on a public debate and consequently a democratic decision-making process. This is one of the reasons why the majority of industry organisations enthusiastically support the EMS approach (but it is fair to say that many industry representatives have also expressed strong reservations). EMS is a system that fits into the neoliberal paradigm of industry self-regulation.

However, industry has to follow the market rules that will leave little room for environmental investments if they do not pay off economically. Enterprises will only be interested in EMS as long as the EMS delivers benefits in financial and material resources. The moment these fruits have been harvested there is no direct interest left for them to strive for a higher level of environmental protection although they may still have an interest in the EMS for other reasons like tax reduction, reduced number of environmental inspections, image building etc.



Therefore, the margin for environmental performance improvements will be very limited. It is important to have a realistic view of the capabilities of EMS standards, in particular with regard to envisaged preferential treatments of organisations with certified EMS in place. Another reason of concern is the promotion of environmental product management systems by the European Commission with respect to energy consuming equipment (working document on EUE), which means to apply the principles of EMS to products. This approach has been strongly criticised by ANEC, BEUC and EEB. A critical review is also a precondition for considering enhancements of EMS standards in order to make them more meaningful than they are at present.

No Performance Required

EMS standards are management tools, which do not require specific performance levels. The legal obligations constitute the minimum requirement. Organisations are encouraged to go beyond legal compliance but the extent to which this is done can be freely chosen. Consequently, EMS certificates do not at all indicate a high level of environmental protection – much to the contrary to the way they are presented by industry.

Both the good performer and the heavy polluter can have EMS in conformity with the standards. ISO 14001 is inferior to the European EMAS regulation in that it does not even require legal compliance – it is just a commitment to regulatory compliance, which is asked for. This means that even non-complying companies can get an ISO 14001 certificate provided they can show that measures have been taken to meet their legal obligation. It is left to the judgement of the certifier how quickly this has to be done. The EMAS regulation stipulates that companies must "provide"¹ for legal compliance and that at least spot checks have to be carried out by the verifier.

¹ The EMAS Regulation is not quite clear whether it stipulates compliance or only a commitment to compliance: Article 3(2)(a) reads: "...covering all the requirements referred to in Annex I, in particular the compliance with the relevant environmental legislation." Annex I-A.2(c) reads: "...organisation's environmental policy ... includes a commitment to comply with relevant environmental legislation..." Annex I-B.1.(b): "Organisations shall be able to demonstrate that they provide for legal compliance with environmental legislation and (c) have procedures in place that enable the organisation to meet the requirements on an ongoing basis."



Another point, which needs to be mentioned, is that "environmental performance" according to ISO 14001 refers to the management system rather than to environmental impacts. Consequently, performance improvement can mean just a management improvement and not necessarily result in a reduction of environmental burdens. In the revision of the EMAS regulation 2001 the definitions of terms were aligned with the ISO definitions. The detailed annex I of the original Regulation and much of its articles' text have been replaced entirely by the very vaguely worded ISO 14001.

The last two points may be of limited relevance in practical terms but they say a lot about the spirit of this approach: to give industry an instrument which does not mean a real obligation to go beyond legal compliance. It is not even ensured that the legal provisions are fulfilled (see footnote 1 and Chapter on Reduced Environmental Controls).

No Differentiation Between Good and Bad Performers

Interestingly, EMS standards have been presented as market-oriented tools, which would lead to some sort of environmental competition between companies aiming at better performance compared to their competitors. As no differentiation is made between good and bad performers (the environmental pioneer gets the same label as the polluter who is just slightly above the legal minimum) there is not even an incentive to go for a high level of protection. Neither EMAS nor ISO 14001 provide for determining any benchmarks that would allow to compare the environmental performance of enterprises.

Another difficulty lies in the fact that legal obligations are different in different countries. This means that the standard is not a real standard because conformance is more difficult in countries with demanding environmental legislation. This issue is further complicated by different certification practices in different countries and even within one country. Those aspects are more relevant for the ISO standard compared to the EMAS regulation.



Reduced Governmental Controls

It is the intention of authorities to award EMS certified companies. Tax reduction, reduced compliance monitoring, and environmental inspections or exemption from some legal provisions are being discussed or have been already implemented. Such benefits are not justified if not linked to real environmental improvements or a high level of protection or a high level of internal monitoring of environmental issues related to legal obligations. In other words it is not the instrument that should be remunerated but the successful application of the instrument.

A particular problem is the envisaged reduction of governmental controls. De facto this means a step in direction of industry self control, while deferring governmental inspections to private certification bodies, which are dependent on certification/verification contracts from industry. Those bodies might be more interested in having a good long-term relationship with their clients to be asked also for the subsequent certification and may therefore be less strict compared to authorities. Another important aspect in this context is the strong competition between certifiers resulting in business advantages for less conscientious verification practices. In addition, it is questionable how comprehensive legal compliance checks are in practice. In many cases the certification body will have to rely on data presented by the organisation and internal audit reports which may be based on arbitrary and subjective choices and judgements (e.g. regarding applicable legislation).

Recent accounting scandals in the US, which have even brought about the ruin of some big companies such as Enron or Worldcom (probably we have just seen the tip of the iceberg) do not quite support the concept of weakening governmental rulemaking and enforcement. A society without clear rules and measures ensuring that these rules are actually complied with is unlikely to succeed – because it would encourage everyone to escape from his or her duties.



Targets and objectives

When defining targets and objectives, both, EMAS and ISO 14001 ask enterprises to “consider” “environmental aspects that have a significant impact”, a wording that does not establishing any priority nor obligation. The choice is left to the enterprise and so the link between the environmental impact of an organisation and the EMS is not necessarily targeted to remedy the most important environmental impacts, but only “significant” ones.

Reporting

Reporting is an issue where ISO 14001 is clearly inferior to the EMAS regulation. The ISO standard just requires that the environmental policy is made available to the public. EMAS requires a validated statement including a description of the significant environmental impacts. The lack of obligation to report significant environmental aspects in the ISO standard is not acceptable at all.

Even EMAS reporting requirements are far from being perfect and give large room for improvement. The production of environmental reports containing a number of different figures for environmental aspects is of limited use for the public at large. It is not astonishing that the interest in such reports is limited. Without clearly defined key indicators of environmental performance and scales to compare (as in case of the EU energy labelling scheme for household appliances) the figures are difficult to interpret even for experts. For instance, the impressive decline of energy consumption could be simply a result of outsourcing of manufacturing facilities. Figures as such do not indicate how they relate to the state of the art. The possibility to make comparisons of the results of environmental management is crucial for the functioning of the tool.

No Evidence For Improved Performance

It is not surprising that there is not much convincing evidence on the table, which suggests that the implementation of an EMS standard has indeed boosted environmental performance despite the fact that a number of studies have been carried out. Typically, these studies are



based on interviews with company representatives. It is understandable that the interview partners confirm the benefits of the implementation of EMS standards and present the level of environmental commitment of their companies in a favourable way. The question is whether these claims can be taken as a proof of success.

But sometimes even the limited questionnaire approach delivers interesting results. For instance, an Austrian EMAS evaluation study (3) demonstrated that a large proportion of EMS companies were of the opinion that they could have achieved a similar environmental benefit without the EMS (though many respondents indicated that it might have been more difficult). Another result of this study was that few EMS companies felt that the implementation of the EMS triggered environmental activities. Most firms considered that the implementation of EMS documented ongoing efforts rather than it initiated measures to protect the environment.

According to a Swedish study (4) 50% of the respondents thought that half of all environmental targets would have been achieved without certified EMS. "In the replies to the questionnaire question of the extent to which the EMS has reduced environmental impact from the company – the mean value lies somewhat nearer to "not at all" than "to a very great extent" on a 6-grade scale – a certain frustration is sensed that more environmental improvements are not being achieved as a result of environmental management work".

Even the literature study (5) ordered by the European Commission and produced in advance of the European EMAS conference in June 2002 and which conveys a very supportive attitude toward EMS has to admit: "Environmental results of EMAS (and other EMS) have been investigated with a lot of different methods. All of them lead to results that are interpretable, with answers that are not easy, clear and quantifiable". It is significant that this part of the literature study comprises just 2 pages.



These observations do not question the need for incorporating environmental considerations into a company's management. They do, however illustrate the limited benefit of the fashionable EMS standard approach in its present format. It must also be noted that companies which are registered according to ISO 14001/EMAS are environmental pioneers with a high level of commitment. Once this registration becomes a must in the future (which could easily happen) it can be expected that not even the environmental improvements achieved today will be found.

Cary Coglianese and Jennifer Nash query whether "the mere presence of an EMS is an appropriate metric for differentiating among firms" (6). Quite rightly they state:

"After all, what distinguishes superior novelists and painters is not the kind of word processors or paintbrushes they use but rather their skills, motivation and perseverance. Similarly, firms that achieve great strides in pollution prevention and other improvements in environmental performance may well owe little or none of that success to the mere use of an EMS".

The authors recommend to remain sceptical about the potential of EMS's and refer to a study, which found that chemical companies, which have adopted the Responsible Care programme (a management system used by chemical industry) do not perform better in terms of pollution reduction than comparable firms not using the approach. This sort of information is still missing with respect to EMS's - a serious omission.

A study regarding the effectiveness and performance of EMS's carried out in Switzerland (7) judges the results with respect to reduction of material use, energy consumption and waste production "disillusioning". It was found that the relative efficiency (related to turnover) was not improved in 25% - 35% of all cases. Only 3% - 12% of all asked firms indicated a strong reduction of these eco-efficiency factors.



Conclusions

"Paper tiger or powerful tool" is the subtitle of a Swedish study on EMAS. It seems that EMS standards – ISO 14001 more, EMAS less – are closer to the former. There is little evidence to suggest that the adoption of an EMS can be viewed as an environmental performance boost. The major beneficiaries of ISO 14001 certification and EMAS verification are presumably consultants and certification bodies. The following measures should be considered to make the instrument more substantive:

- EMS standards must contain a clear obligation to comply with legal provisions (a commitment to comply as in ISO 14001 is insufficient)

- continual improvement of Environmental performance shall mean a measurable reduction of environmental burdens and resource consumption rather than an enhancement of the management system and its measurable output

- EMS standards shall contain the obligation to comply with international environmental agreements irrespective of whether the home country of the organisation has ratified the agreement. In addition, the time scales for the incorporation into EMS standards of such provisions shall be shorter compared to the legal implementation. Both the agreements and the time scales shall be indicated in the relevant standards

- organisations shall be required to apply the same environmental criteria in all countries they operate

- a set of key environmental indicators which allow comparisons between different organisations including appropriate scales shall be developed



- EMS standards shall contain detailed reporting requirements including key performance indicators and data, which allow a comparison between legal provisions or BAT and the actual performance

- minimum performance levels based of the state-of-the-art shall be defined

- organisations which have obtained an EMS registration shall be subject to evaluation studies. The performance achieved shall be compared with the performance of firms which have not implemented EMAS or ISO 14001. Methods for performance ranking shall be developed

- companies shall not be awarded for the mere implementation of an EMS. Instead, incentives (e.g. tax reduction) should be linked to environmental performance. It is also not adequate that EMS firms are given preference in the context of public procurement or enforcement unless they have proved by comparable data their excellence

- under no circumstances the EMS approach shall be applied as a substitute for product specifications (packaging standards, EUE working document of the Commission)

Literature

- 1) ISO 14001 – A missed opportunity for sustainable global industrial development, Riva Krut and Harris Gleckman, Earthscan, 1998



- 2) Negotiating international standards for environmental management systems: the ISO 14000 standards, case study for the UN Vision Project on Global Public Policy Networks, Virginia Haufler, 1999

- 3) Evaluierung der Umsetzung der EMAS-V in Österreich, sowie der Teilnahme von Unternehmen am Gemeinschaftssystem, Schriftenreihe des BMUJF 10/1999

- 4) Environmental management systems – paper tiger or powerful tool, IKIS Eco efficiency Group, IVF Research Publication 828, 2000

- 5) The state of EMAS in the EU, Eco-management as a tool for sustainable development, Literature study, Jens Clausen, Michael Keril and Martin Jungwirth, IÖW and Ecologic, Berlin 2002

- 6) Bolstering private environmental management, Cary Coglianese and Jennifer Nash, John F. Kennedy School of Government, Harvard University, 2001

- 7) Wirksamkeit und Leistung von Umweltmanagementsystemen: eine Untersuchung von ISO 14001-zertifizierten Unternehmen in der Schweiz, Thomas Dyllick, Jost Hamschmidt, Institut für Wirtschaft und Ökologie, Universität St.Gallen, 2000